

Supplementary Table 16 Bacteria species positively correlated with different post-COVID sequelae (P<0.05, from linear mixed models in MaAsLin2).

Symptoms	Number of patients affected	Bacteria species positively correlated with PACS (P<0.05)
Respiratory symptoms		
Cough	9	
Sputum	13	Actinomyces_naeslundii
Nasal congestion/ runny nose	15	Intestinibacter_bartlettii Actinomyces_oris
Shortness of breath	18	Actinomyces_sp_ICM47 Actinomyces_odontolyticus Streptococcus_anginosus_group Streptococcus_vestibularis Streptococcus_gordonii Rothia_mucilaginosa Clostridium_disporicum Actinobaculum_sp_oral_taxon_183 Erysipelatoclostridium_ramosum Veillonella_parvula Streptococcus_mutans Streptococcus_infantis Lactobacillus_mucosae Bifidobacterium_dentium Actinomyces_graevenitzii Olsenella_uli Faecalicoccus_pleomorphus Blautia_producta Propionibacterium_acidifaciens Actinomyces_sp_oral_taxon_448 Pseudopropionibacterium_propionicum Actinomyces_massiliensis Actinomyces_sp_oral_taxon_897 Streptococcus_cristatus Actinomyces_sp_oral_taxon_414 Corynebacterium_durum
Gastrointestinal symptoms		
Nausea	3	Ruminococcus_gnavus
Diarrhoea	5	Actinomyces_naeslundii
Epi pain	6	Clostridium_innocuum
Abdominal pain	3	Blautia_sp_CAG_257 Intestinibacter_bartlettii Eubacterium_limosum Actinomyces_odontolyticus Actinobaculum_sp_oral_taxon_183 Lactobacillus_salivarius Eisenbergiella_tayi

	Erysipelatoclostridium_ramosum
Neuropsychiatric symptoms	
Headache	12
Dizziness	9
Loss of taste	5
Loss of smell	9
Difficulty in concentration	15
Difficulty in sleeping	22
Anxiety	22
Sadness	15
Poor memory	30
Blurred vision	19
Dermatological symptoms	
Hair loss	23
	Intestinibacter_bartlettii Clostridium_innocuum Streptococcus_anginosus_group Eisenbergiella_massiliensis Hungatella_hatthewayi Faecalitalea_cylindroides Eubacterium_limosum Bifidobacterium_dentium

		<i>Clostridium_bolteae</i> <i>Pseudoflavorifactor_sp_An184</i> <i>Faecalicoccus_pleomorphus</i> <i>Actinomyces_odontolyticus</i> <i>Actinomyces_oris</i> <i>Eisenbergiella_tayi</i> <i>Lactonifactor_longoviformis</i> <i>Firmicutes_bacterium_CAG_94</i> <i>Olsenella_uli</i> <i>Massiliomicrobiota_timonensis</i> <i>Actinomyces_sp_oral_taxon_414</i>
Musculoskeletal symptoms		
Joint pain	11	
Muscle pain	16	<i>Intestinibacter_bartlettii</i> <i>Hungatella_hathewayi</i> <i>Streptococcus_anginosus_group</i> <i>Clostridium_innocuum</i> <i>Eubacterium_limosum</i> <i>Actinomyces_oris</i> <i>Ruminococcus_gnavus</i> <i>Clostridium_bolteae</i> <i>Bifidobacterium_dentium</i> <i>Erysipelatoclostridium_ramosum</i> <i>Bacteroides_thetaiotaomicron</i> <i>Actinomyces_odontolyticus</i> <i>Streptococcus_mutans</i> <i>Streptococcus_vestibularis</i> <i>Eisenbergiella_tayi</i> <i>Haemophilus_parainfluenzae</i> <i>Eubacterium_callanderi</i> <i>Streptococcus_infantis</i> <i>Actinomyces_naeslundii</i> <i>Blautia_producta</i> <i>Olsenella_uli</i> <i>Actinomyces_sp_oral_taxon_448</i> <i>Rothia_mucilaginosa</i> <i>Faecalicoccus_pleomorphus</i> <i>Lactobacillus_mucosae</i> <i>Actinomyces_sp_oral_taxon_414</i>
Fatigue	32	<i>Actinomyces_naeslundii</i> <i>Clostridium_innocuum</i> <i>Actinomyces_oris</i> <i>Intestinibacter_bartlettii</i> <i>Actinomyces_odontolyticus</i> <i>Streptococcus_parasanguinis</i> <i>Bifidobacterium_dentium</i> <i>Erysipelatoclostridium_ramosum</i> <i>Streptococcus_anginosus_group</i>

	Megasphaera_micronuciformis Rothia_mucilaginosa Streptococcus_vestibularis Anaerostipes_caccae Streptococcus_gordonii Actinobaculum_sp_oral_taxon_183 Lactobacillus_mucosae Propionibacterium_acidifaciens Actinomyces_sp_oral_taxon_448 Olsenella_uli Streptococcus_infantis Actinomyces_sp_oral_taxon_414 Faecalicoccus_pleomorphus Actinomyces_sp_oral_taxon_897 Lactobacillus_salivarius Actinomyces_massiliensis Corynebacterium_durum
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